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LISTING OF CLAIMS:

1 1. (Original) A catalyst bed for decomposition of monopropellant
2 fuel using a transitional metal catalyst over which the fuel is made to flow; the bed
3 comprising:

4 a plurality of thin metal plates in a stacked contiguous relation, each such
5 plate having a surface of catalytic material and a plurality of flow-through holes of
6 selected size and location for flow of said fuel axially through said stacked plates at least
7 a portion of each such plate on a downstream side being etched to permit lateral flow of
8 said fuel between said plates.

1 2. (Original) The catalyst bed recited in claim 1 wherein said
2 plurality of plates comprises a plurality of groups of said plates, each said group being
3 separated from adjacent said groups by a metering plate having flow-through holes that
4 provide reduced open area compared to the flow-through holes of said adjacent groups of
5 said plates.

1 3. (Original) The catalyst bed recited in claim 2 wherein each said
2 metering plate which is positioned more downstream of an upstream metering plate
3 comprises larger flow-through holes than said upstream metering plate.

1 4. (Original) The catalyst bed recited in claim 1 wherein said flow-
2 through holes of adjacent plates are axially offset from plate to plate to promote lateral
3 flow of said fuel between said plates.

1 5. (Original) The catalyst bed recited in claim 1 wherein said etched
2 downstream side of each said plate comprises unetched portions forming support
3 columns for supporting each said plate on an adjacent said plate.

1 6. (Original) The catalyst bed recited in claim 1 wherein said metal
2 plates are substantially circular.

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1 7. (Original) The catalyst bed recited in claim 1 wherein said metal
2 plates are bonded to one another to form a monolithic stack.

1 8. (Original) A catalyst converter for promoting the decomposition
2 of a liquid fuel into a gas; the converter comprising:
3 a plurality of thin metal plates having a surface formed of a catalyst
4 material and stacked axially along a flow path of said fuel from upstream to downstream;
5 each said plate having a plurality of flow-through holes leading from its upstream surface
6 to its downstream surface, the downstream surface of each said plate being at least
7 partially removed to promote lateral flow of said fuel between each pair of adjacent
8 plates.

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1 9. (Currently Amended) The catalyst converter recited in claim 4 & 8
2 wherein said plurality of plates comprises a plurality of groups of said plates, each said
3 group being separated from adjacent said groups by a metering plate having flow-through
4 holes that provide reduced open area as compared to the flow-through holes of said
5 adjacent groups of said plates.

1 10. (Original) The catalyst converter recited in claim 9 wherein each
2 said metering plate which is positioned more downstream of an upstream metering plate,
3 comprises larger flow-through holes than said upstream metering plate.

1 11. (Original) The catalyst converter recited in claim 8 wherein said
2 flow-through holes of adjacent plates are axially offset from plate to plate to promote
3 lateral flow of said fuel between said plates.

1 12. (Original) The catalyst converter recited in claim 8 wherein said
2 etched downstream side of each said plate comprises unetched portions forming support
3 columns for supporting each said plate on an adjacent said plate.

1 13. (Original) The catalyst converter recited in claim 8 wherein said
2 metal plates are substantially circular.

1 14. (Original) The catalyst converter recited in claim 8 wherein said
2 metal plates are bonded to one another to form a monolithic stack.

1 15. (Previously Amended) A catalyst bed comprising: a generally
2 cylindrical array of catalyst material the axis of which is substantially parallel to the
3 direction of flow of a fluid through said bed, the catalyst material being configured as the
4 surface material of a plurality of stacked, contiguous, thin metal plates having axial flow-
5 through holes of selected size and location to promote uniform flow and contact of said
6 fluid with said catalyst material, at least a portion of each said thin metal plate on a
7 downstream side is removed to provide a gap between adjacent plates to promote lateral
8 flow of said fluid.

1 16. Cancelled

1 17. (Original) The catalyst bed recited in claim 15 wherein said plates
2 are segregated into a plurality of groups of said plates and wherein each said group is
3 separated from an adjacent group by a metering plate having flow-through holes the total
4 area of which is less than the total area of the flow-through holes in said plates of said
5 groups.

1 18. (Original) The catalyst bed recited in claim 17 wherein each said
2 metering plate which is positioned more downstream of an upstream metering plate
3 comprises larger flow-through holes than said upstream metering plate.

1 19. (Original) The catalyst bed recited in claim 15 wherein said flow-
2 through holes of adjacent plates are axially offset from plate to plate to promote lateral
3 flow of said fuel between said plates.

1 20. (Previously Amended) The catalyst bed recited in claim 15
2 wherein said removed portion of each said plate comprises unremoved portions forming
3 support columns for supporting each said plate on an adjacent said plate.

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1 21. (Original) The catalyst bed recited in claim 15 wherein each said
2 plate is characterized by an open area ratio which is defined as the combined area of the
3 flow-through holes divided by the total area of the plate and wherein the open area ratio
4 of said plates generally increases along said direction of flow.
